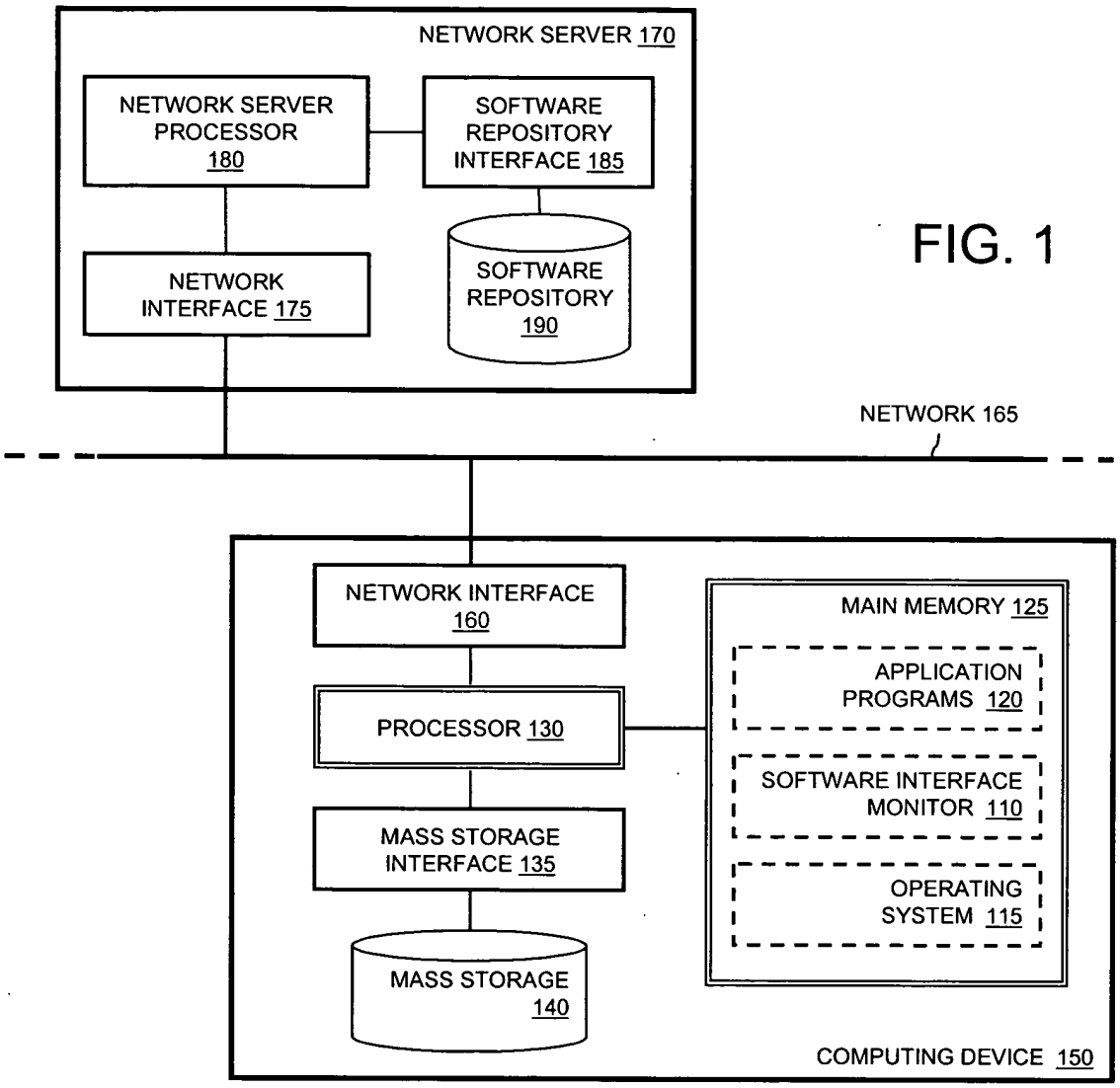
NETWORK SERVER 170
NETWORK SERVER PROCESSOR 180
SOFTWARE REPOSITORY INTERFACE 185
NETWORK INTERFACE 175
SOFTWARE REPOSITORY 190
NETWORK 165
NETWORK INTERFACE 160
PROCESSOR 130
MASS STORAGE INTERFACE 135
MASS STORAGE 140
MAIN MEMORY 125
APPLICATION PROGRAMS 120
SOFTWARE INTERFACE MONITOR 110
OPERATING SYSTEM 115
COMPUTING DEVICE 150

FIG. 1

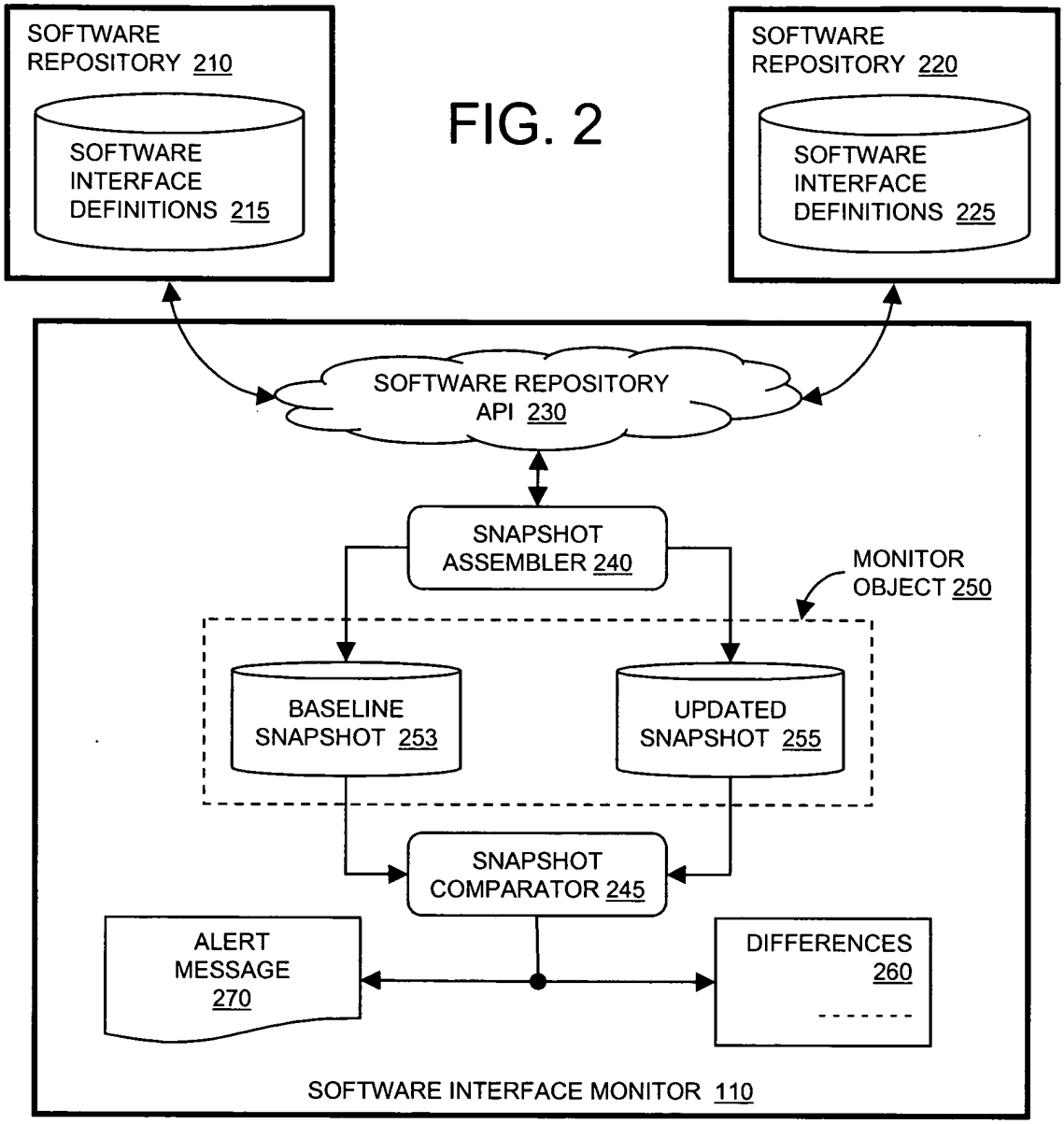
SOFTWARE REPOSITORY 210
SOFTWARE INTERFACE DEFINITIONS 215
SOFTWARE REPOSITORY 220
SOFTWARE INTERFACE DEFINITIONS 225
SOFTWARE REPOSITORY API 230
SNAPSHOT ASSEMBLER 240
MONITOR OBJECT 250
BASELINE SNAPSHOT 253
UPDATED SNAPSHOT 255
SNAPSHOT COMPARATOR 245
ALERT MESSAGE 270
DIFFERENCES 260
SOFTWARE INTERFACE MONITOR 110

FIG. 2

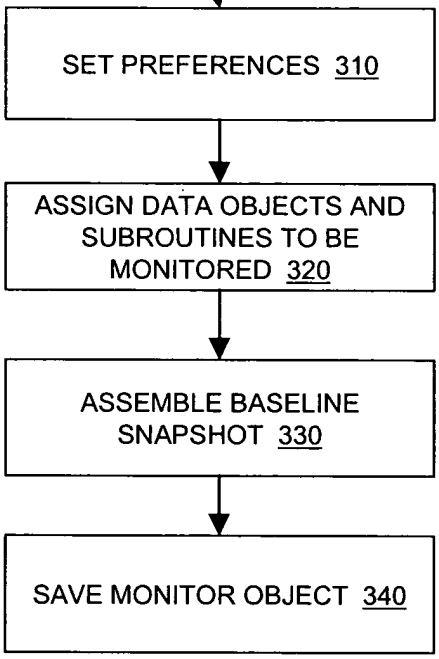
300
SET PREFERENCES 310
ASSIGN DATA OBJECTS AND SUBROUTINES TO BE MONITORED 320
ASSEMBLE BASELINE SNAPSHOT 330
SAVE MONITOR OBJECT 340

FIG. 3

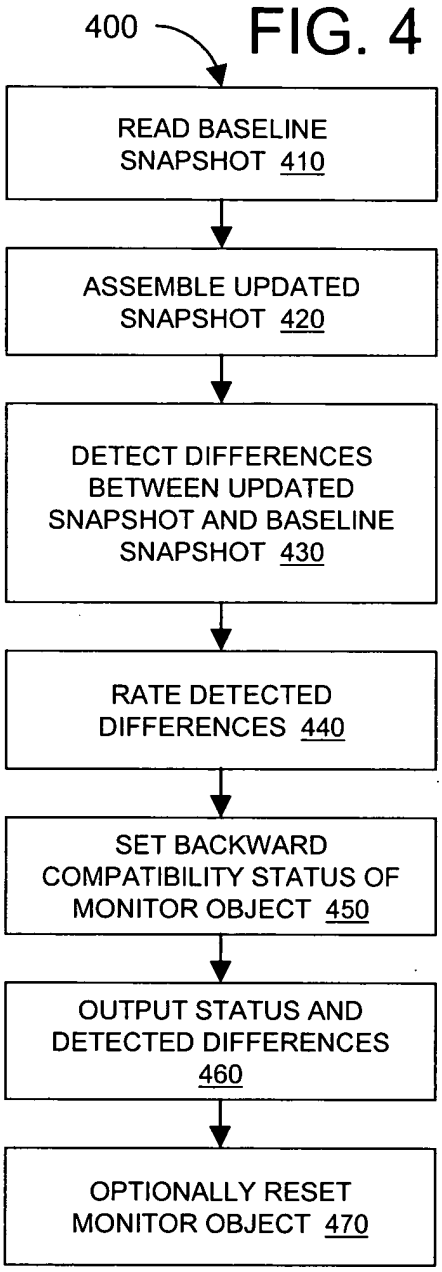
400
READ BASELINE SNAPSHOT 410
ASSEMBLE UPDATED SNAPSHOT 420
DETECT DIFFERENCES BETWEEN UPDATED SNAPSHOT AND BASELINE SNAPSHOT 430
RATE DETECTED DIFFERENCES 440
SET BACKWARD COMPATIBILITY STATUS OF MONITOR OBJECT 450
OUTPUT STATUS AND DETECTED DIFFERENCES 460
OPTIONALLY RESET MONITOR OBJECT 470

FIG. 4

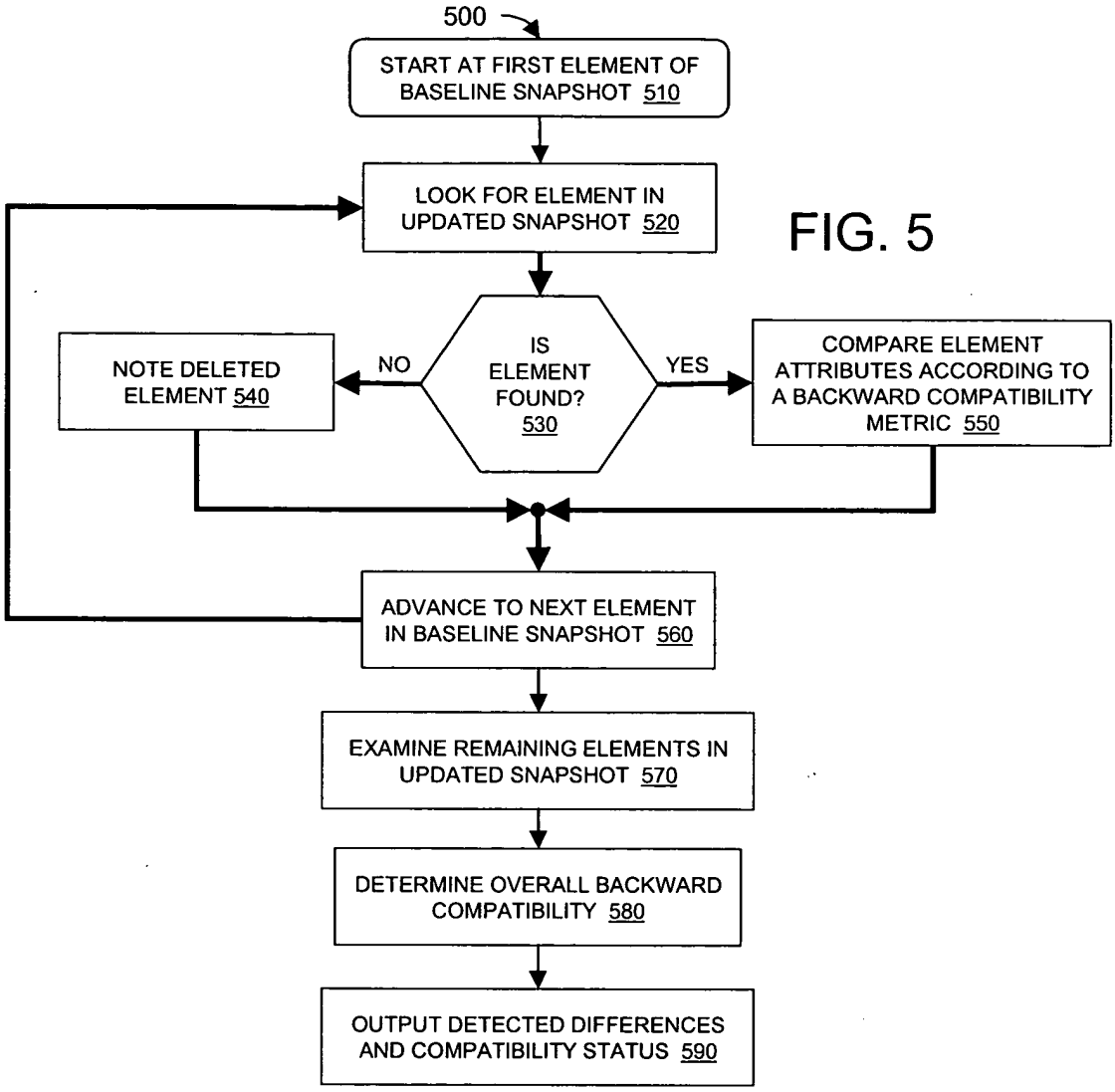
500
START AT FIRST ELEMENT OF BASELINE SNAPSHOT 510
LOOK FOR ELEMENT IN UPDATED SNAPSHOT 520
IS ELEMENT FOUND? 530
NO
YES
NOTE DELETED ELEMENT 540
COMPARE ELEMENT ATTRIBUTES ACCORDING TO A BACKWARD COMPATIBILITY METRIC 550
ADVANCE TO NEXT ELEMENT IN BASELINE SNAPSHOT 560
EXAMINE REMAINING ELEMENTS IN UPDATED SNAPSHOT 570
DETERMINE OVERALL BACKWARD COMPATIBILITY 580
OUTPUT DETECTED DIFFERENCES AND COMPATIBILITY STATUS 590

FIG. 5